

# 2023 Veterinary Alert #1

# Canine Parvovirus – Reported Increase in New York City

- Several veterinary facilities in New York City have reported an increase in cases of canine parvovirus (CPV), a highly contagious virus that can cause severe acute gastrointestinal disease primarily in young, unvaccinated dogs
- Diagnosis is based on clinical presentation and fecal viral antigen or PCR testing
- Treatment is supportive care with fluids, antiemetics, antibiotics, and nutritional support
- Remind people to vaccinate their dogs against CPV and protect dogs until fully vaccinated

Please share with your colleagues in Veterinary Medicine and your staff.

March 21, 2023

Dear colleagues,

This advisory describes a reported increase in canine parvovirus (CPV) diagnosed among dogs seen at several veterinary facilities in New York City (NYC) and provides an overview of CPV.

New York Animal Care Centers has diagnosed 14 dogs as of March 14, 2023, the majority of which were seen in their Bronx and Manhattan facilities. This far exceeds what is typically seen over the course of a single year. The Animal Medical Center in Manhattan and the ASPCA Animal Hospital and Community Medicine programs have also reported an increase in cases. Affected dogs have primarily been puppies and young dogs.

With no national or regional surveillance system for companion animal diseases, the expected or typical number of dogs diagnosed with CPV is unknown. However, these anecdotal reports suggest an increase, which may be limited to focal areas of NYC.

#### **About Canine Parvovirus**

Canine parvovirus is highly contagious among dogs and commonly causes acute gastrointestinal illness and, in rare instances, myocarditis. The virus is not known to infect humans. While any unvaccinated dog is at risk, the disease more often strikes puppies between six and 20 weeks old.

Clinical signs generally appear within 5 to 7 days of exposure. Initial signs may include lethargy, anorexia, and fever and may rapidly progress to vomiting and hemorrhagic diarrhea (25% of dogs may have non-hemorrhagic diarrhea). CPV infects and destroys rapidly dividing cells of the small intestine leading to epithelial necrosis and damage to the gut barrier, which can lead to bacteremia.

Infected dogs shed the virus in their feces often before clinical signs develop and possibly up to 10 days after clinical recovery. Infection occurs through direct oral or nasal contact with virus-containing feces or virus-contaminated fomites (e.g., kennel, equipment).

Consider CPV in any young, unvaccinated, or incompletely vaccinated dog with compatible illness, especially those living in or newly adopted from a shelter. Diagnosis can be pursued with fecal CPV antigen testing or a viral PCR. Treatment is based on supportive care, including fluid and electrolyte therapy, nutritional support, anti-emetics, and antibiotics

Immediately isolate any dog with suspected or confirmed CPV to prevent spread to other dogs and environmental contamination. Place signage and implement strict infection control procedures, including but not limited to use of appropriate personal protective equipment (i.e., gown, gloves, and protective footwear) and frequent and thorough cleaning and disinfection of the environment. Clean surfaces of organic matter and disinfect with a product proven to kill non-enveloped viruses like CPV (e.g., accelerated hydrogen peroxide, potassium peroxymonosulfate, sodium hypochlorite (bleach)).

### Vaccination and Prevention

Per the <u>AAHA</u>, the initial CPV MLV vaccination for dogs 16 weeks of age or younger consists of at least 3 doses of a combination vaccine between 6 and 16 weeks, 2 to 4 weeks apart. Dogs older than 16 weeks of age should receive 2 doses of a combination vaccine, 2 to 4 weeks apart. Upon completion of the initial series, a single dose of a combination vaccine should be administered within one year, and subsequent boosters administered at intervals of 3 years.

A modified vaccination schedule is warranted under the following circumstances:

- In high-density environments such as animal shelters, earlier vaccination and more doses are recommended because of the elevated risk of disease exposure and transmission. Vaccination of puppies using an MLV product starting at 4 weeks of age and continuing every 2 to 3 weeks until they reach 18 to 20 weeks of age is recommended.
- Because maternal antibody levels can block response to MLV vaccination, and levels may
  persist in some dogs beyond 13 to 15 weeks of age, revaccination until 18 to 20 weeks of age
  is recommended in areas of high risk for CPV.

Puppies born to and who nurse from a mother with CPV antibodies are protected for the first few weeks of life; however, susceptibility increases as maternal antibodies wane.

Advise owner they can protect their dogs against CPV by doing the following

- Make sure their dog's CPV vaccination is up to date.
- Do not let puppies or adult dogs come into contact with the fecal waste of other dogs while walking or playing outdoors.
- In adopting a puppy, make sure to work only with reputable shelters or rescue groups who follow recommended vaccine protocols.
- Obtain vaccination records before bringing a new dog in to the home.

Zoonotic and Vector-borne Disease Bureau of Communicable Disease

## ZIVDU@health.nyc.gov

347-396-2600

#### **REFERENCES**

- 1. Cornell Baker Institute for Animal Health Canine Parvovirus page
- 2. Merck Manual Canine Parvovirus Page
- 3. 2022 AAHA Canine Vaccination Guidelines

Visit our webpage for information and resources for veterinarians: <u>Zoonotic and Vector-borne Diseases:</u> <u>Information for Providers</u>

If you do not receive these alerts via email and would like to be added to the distribution list, please email zivdu@health.nvc.gov

## Report animal diseases to the NYC Department of Health.

- Submit online through a secure web-based reporting platform
- Call 347-396-2600
- Fax the Animal Disease Case Report form to 347-396-2753

**Report upon suspicion:** Anthrax, brucellosis, glanders, influenza (novel with pandemic potential), monkeypox, plague, Q fever, rabies, SARS, tularemia

**Report upon laboratory diagnosis:** Arboviral encephalitides, leptospirosis, psittacosis, Rocky Mountain spotted fever, salmonellosis, tuberculosis

Report within 24 hours any outbreak or suspected outbreak of any disease, condition, or syndrome, of known or unknown etiology, which may pose a danger to public health.